

WHAT IS CLAIMED IS:

1. A transistor structure formed in a semiconductor material of a first conductivity type, the transistor structure comprising:
 - 5 a plurality of second conductivity strips formed in the semiconductor material, the plurality of second conductivity strips including alternating drain and source strips;
 - a plurality of gate strips formed over the semiconductor material between the second conductivity strips;
 - 10 an interconnect structure formed over the plurality of second conductivity strips and the plurality of gate strips, the interconnect structure being electrically connected to the second conductivity strips; and
 - a metal structure formed over the interconnect structure, the
15 metal structure including a plurality of first metal strips that are electrically connected to the drain strips, the plurality of first metal strips having widths, lengths, and thicknesses such that each first metal strip has a width, a length, and a thickness.
- 20 2. The transistor structure of claim 1 wherein the widths of the first metal strips are different.
3. The transistor structure of claim 2 wherein:
 - the plurality of first metal strips include a first center metal strip
25 and a first outer metal strip, and
 - the widths of the first metal strips increase from the first center metal strip to the first outer metal strip.

4. The transistor structure of claim 2 wherein the metal structure further includes a first metal connector, the plurality of first metal strips contacting that first metal connector and extending away from the first metal connector.

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5. The transistor structure of claim 2 wherein each first metal strip is electrically connected to each drain strip.

6. The transistor structure of claim 2 wherein the metal structure further includes a plurality of second metal strips formed between the plurality of first metal strips, the plurality of second metal strips being electrically connected to the source strips, the plurality of second metal strips having widths, lengths, and thicknesses such that each second metal strip has a width, a length, and a thickness.

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7. The transistor structure of claim 6 wherein the widths of the source metal strips are different.

8. The transistor structure of claim 7 wherein:
the plurality of second metal strips include a second center metal strip and a second outer metal strip, and
the widths of the second metal strips increase from the second center metal strip to the second outer metal strip.

9. The transistor structure of claim 7 wherein the metal structure further includes a second metal connector, the plurality of second metal strips contacting that second metal connector and extending away from the second metal connector.

10. The transistor structure of claim 7 wherein each second metal strip is electrically connected to each source strip.

5 11. The transistor structure of claim 3 wherein the metal structure further includes a plurality of second metal strips formed between the plurality of first metal strips, the plurality of second metal strips being electrically connected to the source strips, the plurality of second metal strips having widths, lengths, and thicknesses such that each second metal strip has a width, a length, and a thickness.

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12. The transistor structure of claim 11 wherein the widths of the source metal strips are different.

13. The transistor structure of claim 11 wherein:
15 the plurality of second metal strips include a second center metal strip and a second outer metal strip, and
the widths of the second metal strips increase from the second center metal strip to the second outer metal strip.

20 14. The transistor structure of claim 13 wherein the first center metal strip and the second center metal strip have equal widths.

15. A method of forming a transistor structure in a semiconductor material of a first conductivity type, the method
25 comprising the steps of:
forming a plurality of second conductivity strips formed in the semiconductor material, the plurality of second conductivity strips including alternating drain and source strips;

forming a plurality of gate strips over the semiconductor material between the second conductivity strips;

forming an interconnect structure over the plurality of second conductivity strips and the plurality of gate strips, the interconnect
5 structure being electrically connected to the second conductivity strips; and

forming a metal structure formed over the interconnect structure, the metal structure including a plurality of first metal strips that are electrically connected to the drain strips, the plurality of first metal strips
10 having widths, lengths, and thicknesses such that each first metal strip has a width, a length, and a thickness.

16. The method of claim 15 wherein the widths of the first metal strips are different.
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17. The method of claim 16 wherein:
the plurality of first metal strips include a first center metal strip and a first outer metal strip, and
the widths of the first metal strips increase from the first center
20 metal strip to the first outer metal strip.

18. The method of claim 16 wherein the metal structure further includes a first metal connector, the plurality of first metal strips contacting that first metal connector and extending away from the first
25 metal connector.

19. The method of claim 16 wherein each first metal strip is electrically connected to each drain strip.

20. The method of claim 16 wherein the metal structure further includes a plurality of second metal strips formed between the plurality of first metal strips, the plurality of second metal strips being electrically connected to the source strips, the plurality of second metal
- 5 strips having widths, lengths, and thicknesses such that each second metal strip has a width, a length, and a thickness.